

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/08079

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) : G01N 33/53; A61K 38/00; A01N 37/18

US CL : 435/7.23; 530/324; 514/2, 12

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/7.23; 530/324; 514/2, 12

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS, STN

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,776,755 A (ALITALO et al) 07 July 1998, col.8, line 65 to col. 9, line 5	1-29
Y	KARAMYSHEVA, A.F. et al Expression of the FLT4/VEGFR3 receptor tyrosine kinase encoding gene in hepatic tumors. International Journal of Oncology. 25 April 1996, Vol. 8, No. 5, pages 921-924, especially page 921.	1-29
Y	WO 95/33772 A1 (ALITALO et al) 14 December 1995, page 3, line 4 to page 5, line 32.	1-29



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*B* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*A* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

26 JULY 1999

Date of mailing of the international search report

23 AUG 1999

Name and mailing address of the ISA/US  
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US99/08079

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	TSURUSAKI, T. et al Vascular endothelial growth factor-C expression in human prostatic carcinoma and it's relationship to lymph node metastasis. British Journal of Cancer. April 1999, Vol. 80, Nos. 1-2, pages 309-313, especially page 309.	1-29

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## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☒ No protest accompanied the payment of additional search fees.

**BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING**

This ISA found multiple inventions as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Group I, claim(s) 1-12 and 23, drawn to a method of detection of metastatic potential.

Group II, claim(s) 13-22, and 24-29 drawn to a product, flt-4, a process of making and process of using to treat, inhibit, or prevent secondary metastasis.

The inventions listed as Groups I and II do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The inventions in group I are drawn to a method of detecting the expression of flt-4 and subsequent determination of the metastatic potential of a cell.

The inventions in group II are drawn to inhibition of flt-4 for the purpose of treating, inhibiting, or preventing secondary metastasis.

The detection of flt-4 and the inhibition of flt-4 are distinctly different processes, having different reactants, method steps, and outcomes and therefore do not share a specific technical feature.